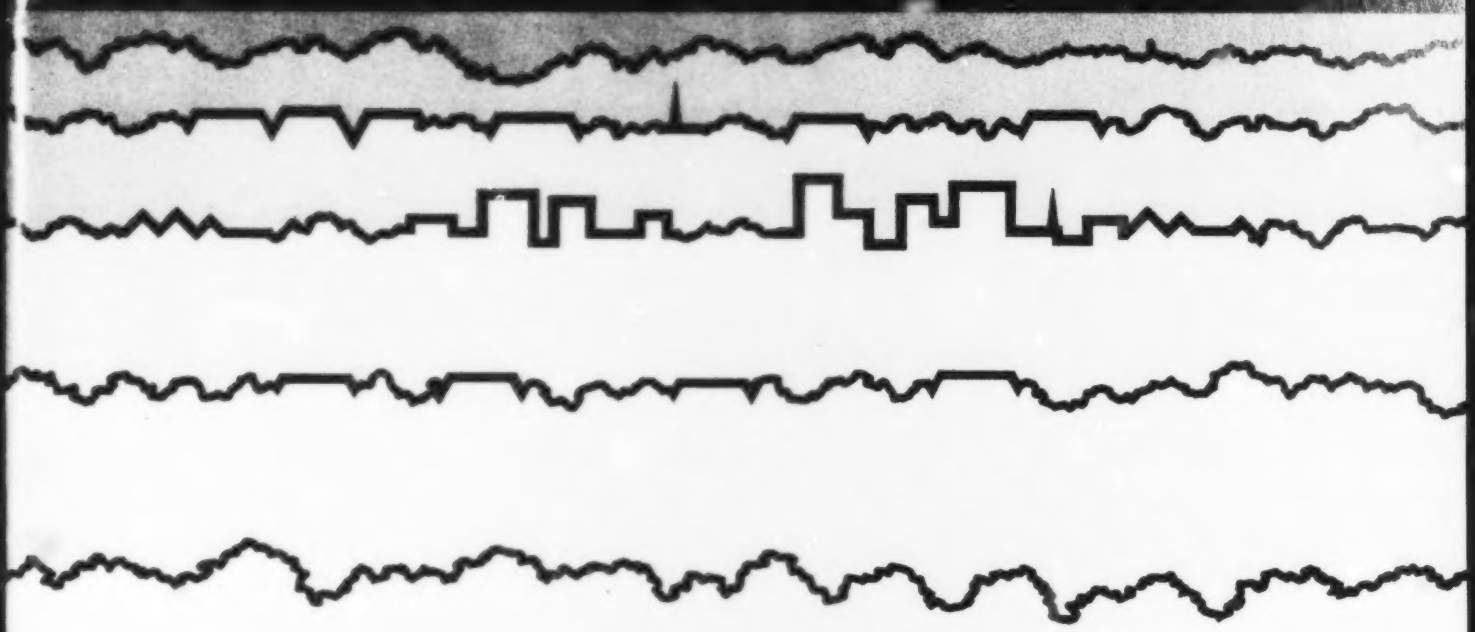
CEARC Canadian Environmental Assessment Research Council

CCREE Conseil canadien de la recherche sur l'évaluation environnementale



FUNDING OF ENVIRONMENTAL IMPACT ASSESSMENT RESEARCH IN CANADA

Acres International Limited

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Funding of Environmental Impact Assessment Research in Canada

Acres International Limited

A Background Paper Prepared for
the Canadian Environmental Assessment
Research Council

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FOREWORD

The Canadian Environmental Assessment Research Council (CEARC) was established on January 30, 1984 by the federal Minister of the Environment to advise government, industry and universities on ways to improve the scientific, technical and procedural basis for environmental impact assessment (EIA) in Canada.

The purpose of commissioning this paper, and indeed of all the other CEARC-sponsored background documents, is to provide relevant information and to stimulate discussion on the topics of interest to the EIA community. The opinions expressed, however, are strictly the authors' own and do not necessarily reflect the views of the members of the Council or its Secretariat.

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CONTENTS

Preface vii

Executive Summary ix

1. STUDY METHODOLOGY 1

Identification of Funding Sources 1
Questionnaire Design 1
Preliminary Survey 1
Refinement of Contact List and Completion of Telephone Interviews 1

2. SURVEY RESULTS AND DISCUSSION 2

Federal Government Agencies 2
Provincial Government Agencies 3
Industry 3
Public Interest Groups 3
Academic Institutions 3
Other Environmental Research Surveys 4

3. CONCLUSIONS AND RECOMMENDATIONS 22

Conclusions 22
Recommendations 22

REFERENCES 23

Appendix A A-1 – Preliminary Contact List 25
A-2 – Final Contact List 27
A-3 – Additional Potential Funding Sources 29

Appendix B EIA/SIA Research Funding Telephone Questionnaire 31

Appendix C Preliminary Survey Results 35

Appendix D Draft Terms of Reference for CCREM Committee on Research Co-ordination 37

PREFACE

Acres International Limited was awarded a contract by Environment Canada to identify current and potential funding sources for environmental impact assessment (EIA) and social impact assessment (SIA) research in Canada. The objective was to assist the Canadian Environmental Assessment Research Council (CEARC) in determining the potential for cofunding of EIA and SIA research.

For the purpose of this study the terms EIA and SIA include the following activities:

- incorporation of EIA and SIA into decision making by government and proponents;
- institutional management of EIA and SIA;
- biological, physical and chemical effects resulting from project development;
- economic and social implications of project development; and
- mitigative measures and monitoring programs to measure impacts and effectiveness of mitigative measures.

The study was limited to Canadian funding sources for non project-specific EIA and SIA research. Seventy-two Canadian organizations were contacted comprising federal and provincial agencies as well as public interest groups, industries, and academic institutions. Seventy-two organizations were the maximum number of contacts possible given the available budget. The survey took place during February and March 1986.

The balance of the text is divided into three chapters. Chapter 1 discusses the study methodology and contains sections dealing with the identification of funding sources, questionnaire design, preliminary survey and refinement of the contact list. Chapter 2 describes the survey results by major categories such as federal and provincial agencies, industry, public interest groups and academic institutions. A brief description of a similiar survey is included. Chapter 3 discusses the conclusions and recommendations.

The assistance of Robert Weir (Chief) and Kathleen Rothwell (Scientific Authority) of the Environmental Impact Systems Division, Environment Canada, in preparing this document is gratefully acknowledged.

The co-operation and assistance received from staff of the various organizations contacted during this research funding survey is very much appreciated.

EXECUTIVE SUMMARY

The purpose of this study was to identify current and potential funding sources for environmental impact assessment (EIA) and social impact assessment (SIA) research in Canada. The objective was to assist the Canadian Environmental Assessment Research Council (CEARC) in determining potential cofunding sources for EIA and SIA research.

The study was limited to potential funding sources for non project-specific EIA and SIA research. A telephone survey was conducted of 72 Canadian organizations comprising federal and provincial government agencies, industries, public interest groups, and academic institutions.

Out of 72 organizations surveyed, 58 (81%) are interested in cofunding or providing support facilities for EIA/SIA research projects. Federal and provincial government agencies, as well as industry associations are the most promising potential funding sources for EIA/SIA research of a non project-specific nature. Private foundations and national wildlife organizations are the most promising sources of funding in the public interest group sector. Universities generally have no funds for co-operative EIA/SIA research efforts but can provide support facilities.

As a result of this study, we recommend that CEARC:

- communicate with the Canadian Council of Resource and Environment Ministers prior to any further studies of this nature to determine the results of their research funding survey;
- consider expanding this research survey to include additional potential funding sources identified during this study and other known potential funding sources;
- include the waste management industry in any future research funding survey in view of the recent interest in EIA research in this area; and
- computerize the results contained in this report to provide more flexibility in accessing and updating the data by agency type, area of research interest, project type, and so forth.

1. STUDY METHODOLOGY

The study methodology involved development of a contact list and questionnaire for use in a telephone survey of potential funding sources. These tasks are described in more detail below.

Identification of Funding Sources

A list of potential funding sources was developed using the following resources:

- discussions with the Scientific Authority within the Environmental Impact Systems Division of Environment Canada;
- published directories of environmental research, i.e.,
  - The *Environmental Research Directory* of the Alberta Environmental Research Trust,
  - The Canadian Electrical Association's *Digest of Electric Utility Related Research in Canada*,
  - *Who to Contact for Research Funding Assistance from the Alberta Government in Agriculture, Engineering and the Natural Sciences* (Government of Alberta 1984),
  - Environment Canada's *Environment Source Book*,
  - Ontario Ministry of the Environment's *Inventory of Research and Development Projects*, and
  - Environmental Conservation Service's *Baseline Studies Program, Fiscal Year 1984/85*;
- computerized research directories, i.e.,
  - The Canadian Plains Research Center's CANPLAINS Database, and
  - The *Directory of Federally Supported Research in Universities 1984-85* (CISTI 1985);
- consultations with managers in government, industry and public interest groups who are involved in EIA/SIA research; and
- personal knowledge of promising EIA/SIA research funding contacts in government, industry and public interest groups.

Following completion of the above subtasks a preliminary contact list of potential funding sources was developed as shown in Appendix A-I. It comprised 21 federal government agencies, 20 provincial government agencies, 11 industry associations, 12 public interest groups, and 8 academic institutions.

Questionnaire Design

A questionnaire (Appendix B) was then designed as a guide for use in the telephone survey. It was intended to address the six broad areas of research of interest to CEARC, i.e.,

- prediction and monitoring,
- risk analysis,
- EIA, management, and decision making,
- improvements in administrative procedures,
- mitigation and compensation, and
- post-project evaluation.

In addition to the basic question of whether an organization was interested in cofunding of EIA/SIA research projects, the questionnaires also addressed such issues as the type of funding support available, funding constraints, currently funded environmental studies of a non project-specific nature and future areas of emphasis in EIA/SIA research.

Preliminary Survey

A preliminary survey of 22 of the 72 organizations was conducted to obtain an indication of the responses and to allow refinement of the questionnaire and contact list. A balanced mix of organizations was selected from all five categories (i.e., provincial and federal governments, industry, public interest groups, and universities). The organizations contacted in this preliminary survey and a brief summary of results are presented in Appendix C.

Refinement of Contact List and Completion of Telephone Interviews

The preliminary survey indicated that federal and provincial government agencies, and industry, were the most promising sources for cofunding of EIA/SIA research. Following discussions with the Scientific Authority it was decided to drop further contact with the academic institutions and to expand the number of contacts made to provincial government and/or industry sources. The final contact list is presented in Appendix A-2 and comprises 19 federal government agencies, 26 provincial agencies, 11 industry affiliations, 12 public interest groups, and 4 academic institutions.

2. SURVEY RESULTS AND DISCUSSION

Appendix A-2 identifies all the organizations surveyed and indicates those with an interest in cofunding and those which have no funding support available whatsoever.

Out of 72 organizations surveyed, 58 are interested in cofunding or providing support facilities for EIA/SIA research projects and this is further broken down by category in Table 1.

It was also apparent that current and future areas of priority within the federal government agencies surveyed will emphasize EIA research rather than SIA research. A notable exception is the Social Sciences and Humanities Research Council of Canada which provides grants pertaining to the social side of ecological and other issues.

Three federal agencies out of 19 surveyed were not in a position to provide any type of support for cofunding of EIA/SIA research.

Table 1

Funding Sources for EIA/SIA Research by Sector

Agency Type	Interest in Cofunding	No funding Support	Totals
Federal government	16	3	19
Provincial government	25	1	26
Industry	9	2	11
Public Interest Groups	7	5	12
Academic Institutions	1	3	4
Total	58	14	72
(% of Total)	(81%)	(19%)	

With regard to the 58 agencies identified above, 48 have funds for EIA/SIA research while the other 10 agencies can provide only support facilities. Further details on each agency, including areas of research interest and funding constraints are provided by sector in Table 2 at the end of this section. It is emphasized that this table is not a comprehensive listing of potential funding sources for EIA/SIA research in Canada. Time and budget considerations limited the number of organizations surveyed for this study. However, additional promising contacts came to light during the survey and these are listed in Appendix A-3.

Further details on funding activities by sector are provided below.

Federal Government Agencies

Out of 19 federal government agencies surveyed, 16 indicated an interest in cofunding as described in Table 2. Co-operative efforts between federal agencies are commonplace, although many of these identified funding constraints. These were primarily related to the scope of their mandate, i.e., the oil and gas industry, fish habitat management, health effects, and so forth.

- The Land Resource Research Institute of Agriculture Canada advised that due to recent cutbacks associated with contract research, it would no longer be able to participate in cofunding or provide staff support for EIA/SIA projects.

- The Environmental Secretariat at the National Research Council of Canada (NRC) was cut in November 1984, and the 20 staff within this secretariat ceased all activities as of March 31, 1986. The Division of Biological Sciences within NRC now has a very narrow scope and is not involved in environmental research nor is it interested in cofunding of such projects.

- Public Works Canada advised that their studies are typically project-specific EIAs and are dependent for the most part on revenue from other agencies. However, they do have an interest in ensuring that their screening process becomes effective. In this respect they could be interested in looking at the Environmental Assessment and Review Process (EARP) with a view to seeing how it works and how the public responds to it. Perhaps as their attitude toward EIA changes, Public Works could eventually play a more active role in EIA/SIA research.

Provincial Government Agencies

Twenty-five out of 26 provincial government agencies contacted expressed an interest in cofunding of EIA/SIA research or in the provision of support facilities for such projects (see Table 2). Most would have funds available for research of mutual interest except for the provincial research councils which, like private consultants, operate on a contract basis and provide only support facilities (staff and laboratories).

Co-operative funding between the federal and provincial governments usually requires a federal-provincial agreement. For this reason it is likely that two levels of contact will be required in order to identify programs of mutual interest and to secure funding. An initial contact will be necessary at the technical research management level to identify EIA/SIA research projects for cofunding. Once this has been decided and a level of effort determined, federal and provincial deputy ministers would likely have to approve funding for the proposed co-operative efforts if a federal provincial agreement were not already in place. In at least one instance, in Manitoba, a Federal Provincial Liaison Committee is already in existence which includes a representative from Environment Canada. In Manitoba's case, the Liaison Committee meets biweekly to discuss areas of mutual co-operation.

In Quebec, four provincial agencies expressed an interest in federal-provincial co-operation on EIA/SIA research, i.e., Environment Quebec, the Quebec Ministry of Agriculture and Fisheries, the Quebec Ministry of Energy, Mines and Resources, and Quebec Recreation, Game and Fish.

Only one provincial agency contacted advised that they do not get involved in EIA/SIA research. This was the Environmental Assessment Branch of the Ontario Ministry of the Environment (MOE) which deals with legislative aspects as well as the review and approval of environmental assessments. Within MOE the Policy and Planning Branch has a Research Co-ordination Unit which is primarily involved with prediction/monitoring and risk analysis components of EIA and which does have an interest in cofunding.

Industry

Nine of the 11 industry contacts expressed an interest in cofunding of EIA research. The areas and extent of research interest are described in Table 2. As might be expected, industry is geared toward the physical side of impact assessment rather than social issues.

Industry associations often take on the responsibility of contracting out non project-specific research for their association members. The Canadian Electrical Association, the Canadian Petroleum Association, and the Petroleum Association for Conservation of the Canadian Environment (PACE) all do so.

The Institute for Chemical Science and Technology was recently created by four member companies (Polysar, Esso Chemical, CIL, and Dow) to oversee research in the chemical and petroleum processing industries. Any cofunding requests pertaining to EIA research projects in this area should, therefore, be directed to the Institute, or to Dow Chemical in Sarnia who have previously cofunded with Environment Canada on projects of mutual interest.

Occasionally, other private companies will cofund with federal agencies on environmental studies, for example, Union Gas Limited and Gulf Canada Resources Inc.; but it appears more common to have industry associations take the lead role when it comes to non project-specific environmental research.

The two industry associations expressing no interest in cofunding of EIA/ SIA research were the Canadian Forestry Association and the Canadian Gas Association.

Public Interest Groups

Out of 12 public interest groups surveyed, 7 had an interest in cofunding; these are listed in Table 2.

Generally, private foundations are the most promising funding sources in this sector, although some may have a requirement that projects be steered by a registered charitable organization.

There are also some significant conservation groups, for example, the World Wildlife Fund and Ducks Unlimited, which have substantial resources available for research, although certain restrictions are placed on the use of these funds (see Table 2).

Provincial wildlife associations tend to rely on association memberships and external grants, and it is unlikely that they would have funds or facilities to participate in cofunding of EIA/SIA research. Similarly, the Federation of Associations on the Canadian Environment and Provincial Conservation Councils rely entirely on external support and have no funds or facilities to participate in cofunding of EIA/SIA research.

Academic Institutions

The survey was limited to four universities (listed in Appendix A-2) due to the poor result of the preliminary survey for this sector (see Appendix C) and the knowledge that universities generally depend on external funding for their research activities.

Out of the four universities surveyed, only McGill expressed an interest in cofunding (through provision of support facilities). The Centre for Northern Studies at McGill University participates with other agencies in EIA research by offering their laboratory facilities and staff at Schefferville, Quebec for programs of mutual interest.

Similar co-operative efforts may also be possible at other universities where environmentally related research facilities are available; for example, Centre de recherches en aménagement et développement (Université Laval), Kananaskis Centre for Environmental Research (University of Calgary), or Westwater Research Centre (University of British Columbia).

Other Environmental Research Surveys

During the course of this survey it became apparent that a similar research funding survey had already been initiated by the Canadian Council of Resource and Environment Ministers (CCREM).

The Council established a Committee on Research Co-ordination at their annual meeting in Toronto in 1985 whose mandate is to promote more cost-effective spending on research and development activities in the area of environmental protection research. As a first step they have asked their participating members to prepare an inventory of such activities within their jurisdictions, giving budget and contact person.

There is clearly a potential for overlap between the two surveys although it is important to note that the CCREM effort is primarily oriented toward government agencies and does not include the private sector. The Council anticipates publishing its inventory by the summer of 1986 and is now considering a similar effort in the field of environmental conservation research and development. When asked about their interest in EIA/SIA research, the Council indicated that it was uncertain about how to proceed at this time but was thinking of including it as part of the study on environmental conservation. The Draft Terms of Reference for the Committee are given in Appendix D.

The only other research survey that came to light is one carried out by the Association of Canadian Universities and Colleges of Canada, 151 Slater Street, Ottawa, (613) 563-1236. This association produces a directory of Canadian granting foundations which is updated on a regular basis.

TABLE 2

TABLE 2

Summary of Potential Funding Sources for EIA/SIA Research

Agency	Contact	Area of Research Interest	Recent Projects
Federal Agencies			
Agriculture Canada Canadian Forestry Services Hull, Quebec J8Y 3Z4	Dr. L. W. Carison Director, Research Research and Technical Services Directorate (819) 997-1107	Prediction and monitoring Improvements in administrative procedures Mitigation and compensation	Acid rain program Moose habitat studies Pesticide registration
Energy, Mines and Resources Office of Environmental Affairs Ottawa, Ontario K1A 0E4	J. D. McTaggart-Cowan Director, Office of Environmental Affairs (613) 992-9924	Prediction and monitoring Risk analysis EIA management and decision making Mitigation Post-project evaluation	Alternate energy futures (with Environment Canada)
Environment Canada Atmospheric Environment Service Ottawa, Ontario K1A 0H3	R. V. Horne EARP Coordinator (819) 997-6725	Prediction and monitoring	Provision of climatology related to wind, temperatures, precipitation, sea ice and icebergs
Environment Canada Environmental Impact Systems Division Hull, Quebec K1A 0H3	R. H. Weir Chief (819) 997-1731	Prediction and monitoring EIA management and decision making Post-project evaluation	National inventory of biological effects monitoring
Environment Canada Federal Environmental Assessment Review Office Hull, Quebec K1A 0H3	Dr. G. Beanlands Director of Research (819) 997-1000	Prediction and monitoring Risk analysis EIA management and decision making Improvements in administrative procedures Mitigation and compensation Post-project evaluation	Post-audit studies Cumulative EIA/SIA
Environment Canada Lands Directorate Hull, Quebec K1A 0H3	E. B. Wiken, Chief, Ecological Research and Integrated Programs Division (819) 997-2321	Prediction and monitoring EIA management and decision making Mitigation	Ecological Land Survey guidelines (prepared for FEARO)
Environment Canada (Parks) Natural Resources Branch Hull, Quebec K1A 1G2	Dave Lohnes Director (819) 994-3244	Prediction and monitoring Mitigation Post-project evaluation	EIA of linear development (e.g., twinning of Trans-Canada Highway)
Fisheries and Oceans Canada Fish Habitat Management Branch Ottawa, Ontario K1A 0E6	Sandy Lewis (Freshwater and Arctic Habitat) (613) 990-0185 Karen Brown (Marine Habitat) (613) 990-0207	Prediction and minitoring Improvement in administrative procedures	EIA Monitoring
Fisheries Research Directorate Fisheries and Oceans Canada Ottawa, Ontario K1A 0E6	Dr. Barry Muir Director General (613) 990-0271	Prediction and monitoring	Effects of acid rain on the ecosystem Cancer development in fish populations of the Great Lakes from industrial waste discharges

Future areas of Interest	Type of Funding Support[1]	Funding Constraints (and other notes)
Acid rain program Widlife habitat studies Pesticide registration	C	CFS Interest
No priority areas specified	C	Must be of a practical nature, incorporating engineering and economic components as well as environmental aspects
None specified	P,S	Relevance to AES
Followup, prediction, cumulative impact assessment	C	Submit applications in first quarter of fiscal year (Apr.-June); will consider unsolicited proposals anytime
	C	Specific to EIA/SIA
Ecological boundary implications for EIA	C,P,S	Restricted to priority areas established for each fiscal year
Post-project monitoring	C	
Predictive capabilities of EIA Cumulative effects Effects of interjurisdictional legislative approvals on EIA	C	Application to fish habitat management. Apply before summer for small projects; Apply by Sept. for large or long-term projects for next fiscal year
Acid rain Toxic chemicals	P,S	Must be fisheries related

TABLE 2—Continued

Agency	Contact	Area of Research Interest	Recent Projects
Health and Welfare Canada National Health Research and Development Program Ottawa, Ontario K1A 1B4	Dr. R. A. Heacock Extramural Research Program (613) 954-8538	Risk analysis	None specified
Indian and Northern Affairs Resource Development Directorate Hull, Quebec K1A 0H4	Duncan Marshall, Director Resource Development Impacts (819) 997-2752	Mitigation and compensation Public participation	Hazardous waste cleanup in Ontario Indian communities Public hearing interventions
Indian and Northern Affairs Northern Policy and Coordination Branch Social Research and University Affairs Division Hull, Quebec K1A 0H4	Donat Savoie (819) 997-9120	Prediction and monitoring Miligation and compensation	None specified
Indian and Northern Affairs Northern Environmental Protection Directorate Hull, Quebec K1A 0H4	Ted Langtry Assistant Director (819) 997-9090 (Responsible for funding through NOGAP)	Improvements in administrative procedures Prediction and monitoring	Arctic marine oil spill program(AMOP) Cumulative impacts
Indian and Northern Affairs Environmental Studies Revolving Fund Renewable Resources and Northern Env't Branch Hull, Quebec K1A 0H4	Dr. O. H. Loken Director (819) 991-1992	Prediction and monitoring	Prediction of iceberg season severity on East Coast environment Oil spill testing in the Beaufort Sea
Natural Sciences and Engineering Research Council of Canada Ottawa, Ontario K1A 1H5	J. E. Halliwell Director Research Grants Directorate (613) 995-5833	Prediction and monitoring Risk analysis	Impact of urban development on groundwater quality
Social Sciences and Humanities Research Council of Canada Ottawa, Ontario K1P 6G4	Stephen Goban Director, Strategic Grants Division (613) 992-4301	EIA/SIA management and decision making	Comparison of forest management policies (Ontario-Quebec-New York) Wildlife management after the James Bay Agreement EA of development projects (influences of international and domestic law)
Provincial Agencies			
Alberta Environmental Research Trust J.J. Bowlen Bldg.8th Floor 620 Seventh Ave. S.W. Calgary, Alberta T2P 0Y8	J. Russell Secretary (403) 297-2360	Prediction and monitoring Mitigation	Effects of incresed salinity on rivers in Southern Alberta Aquatic habitat studies Foundry dust baghouse waste characterization

Future areas of Interest	Type of Funding Support	Funding Constraints (and other notes)
Risk assessment (social and physical aspects)	C,P,S	Health component; apply by Dec. 1 for next fiscal year
Hazardous waste cleanup of Indian communities Mercury pollution Acid rain impacts on Indian communities and effects on fishing and trapping opportunities	C	Application to Indian Affairs
None specified	S	Support facilities available at Igloo Lake and Inuvik (library, conference room facilities)
Applied research in support of regulatory management AMOP program Cumulative impacts	C	Must be oil and gas related to be cofunded under NOGAP; must have application to NWT and Yukon
Decided by committee (which includes representation from Environment Canada).	C	Relevance to oil and gas industry
Environmental toxicology Biotechnology Industrial processes and materials Ocean sciences Food and agriculture	G	Restricted to natural science and engineering disciplines, application deadlines of May 1, and Nov. 1 each year
Human context of science and technology	G	Apply by Oct. 1 for next fiscal year (April 1)
Primary interest in air, land and water resources; will review requests for SIA research	G	Relevance to Alberta environment; Oct. 1 deadline for applications

TABLE 2 – Continued

Agency	Contact	Area of Research Interest	Recent Projects
Alberta Energy and Natural Resources Reclamation Research Division 2nd Floor, Pacific Plaza 10909 Jasper Avenue Edmonton, Alberta T5J 3M8	Dr. P. F. Ziemkiewicz Director (403) 427-8042	Prediction and monitoring Mitigation Post-project evaluation	Effects of surface mining on groundwater Soil reconstruction for agriculture after mining
Alberta Environment Research Management Division 10405 Jasper Avenue Edmonton, Alberta T5J 3N4	H. P. Sims Director (403) 427-3943	Prediction and monitoring Risk analysis EIA management Improvement in administrative procedures Mitigation Post-project evaluation	Acid Deposition Research Program (ADRP)
Alberta Department of Forestry, Fish and Wildlife Division 9945-108 Street Edmonton, Alberta T5K 2G6	Tom Mill Director, Fisheries (403) 427-6730 Robert Andrews Director, Wildlife (403) 427-9505 Ken Ambrock Habitat Branch (403) 427-9505	Prediction and monitoring Mitigation and compensation	Humane trapping program Socio-economic aspects of wildlife use Waterfowl compensation program
Alberta Research Council 4445 Calgary Tr. S. Edmonton, Alberta T6H 5R7	Dr. R. Fessenden Head, Terrain Sciences (403) 438-0555	Prediction and monitoring Mitigation	Land farming of industrial wastes Contamination of groundwater from heavy oil development Technology for heavy metal analysis of soils
B. C. Ministry of Environment Planning and Assessment Branch Parliament Buildings Victoria, B.C. V8V 1X5	J. O'Riordan Director (604) 387-4441	Prediction and monitoring EIA management and decision making Mitigation and compensation Post-project evaluation	Acid rain impacts on terrestrial and aquatic biota Disposal of toxic wastes Wastewater treatment technology Recreational and commercial values of wildlife and fisheries resources
B.C. Research 3650 Wesbrook Mall Vancouver, B.C. V6S 2L2	Dr. John Leach Manager, Corporate R&D (604) 224-4331	Prediction and monitoring Mitigation	Evaluation of socio-economic impacts of acid rain in eastern Canada Mappling of wetlands in B.C. using satellite data

Future areas of Interest	Type of Funding Support	Funding Constraints (and other notes)
Long-term monitoring of soil reconstruction Reclamation research for oil and gas industry	C	Reclamation research for coal, oil and gas industries
Pesticides Biotechnology Acid deposition Air quality/climatology Reclamation Geoscience Water treatment/waste management Water resources Environmental contaminants Environmental emergencies/risk assessment Environmental information	C	Federal/provincial agreement required for cofunding
North American Waterfowl Management Program	C,P,S	Relevance to Alberta
Disposal of Industrial and municipal wastes Surface water and groundwater resources Air quality studies Industrial plant decommissioning	C, P, S	Strong applied research component
Acid rain Waste management groundwater contamination Fisheries management Aquatic biology studies	C, P, S	
Acid rain control processes Industrial and hazardous waste utilization	P, S	Unlikely that funds available for cofunding but may be possible for program of mutual interest

TABLE 2 – Continued

Agency	Contact	Area of Research Interest	Recent Projects
Manitoba Research Council 2nd Floor, 155 Carlton Street Winnipeg, Manitoba R3C 3H8	Dr. Erling Nyborg Executive Director (204) 945-8744	Prediction and monitoring Mitigation Improvements in administrative procedures	PCB monitoring Monitoring of automobile emissions Stack emission controls for smelters Monitoring of contaminants in the food industry Alternate uses for effluents from food processing industries
Manitoba Department of Environment and Workplace Safety and Health Winnipeg, Manitoba R3C 3Z5	Gerry Spiegl Director, Planning Research and Evaluation (204) 945-8443 or N. Brandson (EIA) (204) 945-7107	Prediction and monitoring Improvements in administrative procedures Mitigation and compensation	PCB Incineration Review of environmental legislation in Manitoba (with EPS)
N.B. Department of Municipal Affairs and the Environment P.O. Box 6000 Fredericton, New Brunswick E3B 5H1	Dr. David Besner Director (506) 453-2669	EIA management and decision making	Seminar on EIA (with Dalhousie University)
New Brunswick Research and Productivity Council P.O. Box 6000 College Hill Road Fredericton, New Brunswick	Dr. Roy Boorman Executive Director (506) 452-8994	Prediction and monitoring	NA[1]
Newfoundland Department of Environment Environmental Assessment Division Elizabeth Towers, Elizabeth Avenue P.O. Box 4750 St. John's, Newfoundland A1C 5T7	Michael Rigby A/Director (909) 576-2562	Prediction and monitoring Mitigation Post-project evaluation	Spruce bud worm monitoring
Nova Scotia Department of the Environment 5151 Terminal Road P.O. Box 2107 Halifax, Nova Scotia B3J 3B7	A. J. Crouse Director (902) 424-5300	Prediction and monitoring EIA management and decision making	Sydney river environment quality as a result of mining activities Public perception of hazardous materials management
Nova Scotia Research Foundation P.O. Box 790 Dartmouth, Nova Scotia B2Y 3Z7	Dr. D.E.T. Bidgood VP Applied Science (902) 424-8670	Prediction and monitoring	Assimilation of oil in sediments
Ontario Ministry of Agriculture and Food Technology and Field Services 11th Floor, 801 Bay St. Toronto, Ontario M7A 2B2	Dr. J. C. Rennie Assistant Deputy Minister (416) 965-6695	Prediction and monitoring Mitigation	Monitoring of pesticide and herbicide residues Erosion control methods

Future areas of Interest	Type of Funding Support	Funding Constraints (and other notes)
Research relating to their facilities, i.e, Industry Technology Development Centre, Food Products Development Centre	P, S	No budget available for cofunding
Determined in discussions with Federal-Provincial Liaison Committee	C, P, S	Application to Manitoba
Seminars/workshops on EIA	P, S	Restricted to N.B. and seminars/workshops on EIA
Plant ecology Forest-related research Organic chemistry analysis	P,S	No budget available for cofunding
Cumulative EIA of multiple developments Post construction rehabilitation Strategies for Nfld. environment	P,S	Must have application to Nfld.; No budget available for cofunding at present
Sewage treatment for coastal communities (to improve ocean receiving water quality) Fate of pollutants in ocean environments	C,P,S	Must have application to N.S.; apply by September for next fiscal year (April 1)
Air and water environments analytical chemistry	C,P,S	Must have application to Nova Scotia
Soil conservation and management Integrated pest management	C,P,S	None identified; prefer application before April 1 but no rigid deadlines

TABLE 2 – Continued

Agency	Contact	Area of Research Interest	Recent Projects
Ontario Ministry of the Environment Policy and Planning Branch 12th Floor 135 St. Clair Ave. W. Toronto, Ontario M4V 1P5	E. Piché Coordinator Research Coordination Unit (416) 965-0641	Prediction and monitoring Risk analysis	Factors that influence assessments of health effects of air pollution Freshwater clams as monitors of the nearshore environment Hazardous organic chemicals in groundwater at Ontario's Landfills
Ontario Ministry of Natural Resources Fisheries Branch Whitney Block, Queen's Park Toronto, Ontario M7A 1W3	Dr. J. A. MacLean Supervisor Fisheries Research Section (416) 832-2761	Prediction and monitoring	Social response (user groups) to changes in regulations Attitudinal changes in response to changes in resource base Studies of sampling design/methods Life history models/community dynamics
Ontario Ministry of Natural Resources Wildlife Branch Whitney Block, Queen's Park Toronto, Ontario M7A 1W3	D. W. Simkin Director (416) 965-4252	Prediction and monitoring Mitigation	Wetland evaluation program
Ontario Research Foundation Sheridan Park 2395 Speakman Drive Mississauga, Ontario L5K 1B3	Dr. W. Sowa Coordinator, Business Development (416) 822-4111	Prediction and monitoring	Indoor air quality studies Monitoring of air emissions in Sarnia area Acid rain studies Stack sampling
Environment Quebec 3900 rue Morly Ste. Foy, Quebec G1X 4E4	H. St. Martin Director of Research (418) 643-2073	Prediction and monitoring Mitigation	Survey of environmental biotechnology in Quebec Treatment of pig wastes (with EPS)
Quebec Ministry of Agriculture and Fisheries 2700 rue Einstein Ste. Foy, Quebec G1P 3W8	André Vézina ADM (418) 643-7762 or Jean Hébert Director of Research (418) 643-2459	Prediction and monitoring	NA
Quebec Ministry of Energy, Mines and Resources Forest Division 200 Chemin Ste. Foy Ste. Foy, Quebec G1R 4X7	Claude Godbout Director of Research (418) 643-7994	Prediction and monitoring	Effects of pollutants on forest resources (especially maple dieback)

Future areas of Interest	Type of Funding Support	Funding Constraints (and other notes)
Air quality Water quality Waste management Analytical methodologies	G,C,P,S	None identified
Perception of industry and public (e.g., sport fishermen) of future environmental problems Determination of buffer areas around lakes and rivers (where no tree cutting allowed)	C,P,S	Relevance to Ontario fisheries and agency's priority areas; apply by Nov. 1 for next fiscal year (April 1)
Effects of forestry practices on moose Impact assessment of developments on wildlife Impacts of toxic chemicals on wildlife	C,P,S	Relevance to Ontario wildlife; apply by April for next fiscal year
No priority areas identified	P,S	None identified
Environmentally acceptable dredging techniques for deep water environments Report pending on priority areas for future research	C,P,S	Application to Quebec environment
Impacts of pesticides on water quality and soils Effects of acid rain on maple tree resources	C,P,S	Application to agriculture or fisheries in Quebec
None identified	C,P,S,	Application to forest resources in Quebec: apply by December for next fiscal year

TABLE 2 – Continued

Agency	Contact	Area of Research Interest	Recent Projects
Quebec Ministry of Recreation, Game and Fish Wildlife Branch 150 est boul. St. Cyrille Quebec City, Quebec G1R 4Y3	Gilles Barras Director General (418) 644-9376	Prediction and monitoring Mitigation	Acid rain effects on freshwater fisheries
Quebec Ministry of Recreation, Game and Fish Socio-Economics and Research Service 150 est boul. St. Cyrille Quebec City, Quebec G1R 4Y3	Jacques Auger Director (418) 644-1361	Prediction and monitoring Mitigation	National socio-economic survey of Canadian fishermen
Saskatchewan Department of Environment Coordination and Assessment Branch 3085 Albert St. Regina, Saskatchewan S4S 0B1	R. E. Walker Director (306) 787-6171	Prediction and monitoring Mitigation Post-project evaluation	Environmental sensitivities and reclamation alternatives related to oil and gas developments
Industry			
Canadian Electrical Association Suite 580, 1 Westmount Square Montreal, Quebec H3Z 2P9	Dr. E. Ezer Director, Research and Development (514) 937-6181	Prediction and monitoring EIA management and decision making Mitigation	Development of a generic EA method for hydro facilities Mitigative measures for Canadian hydro facilities
Canadian Petroleum Association 633-6th Ave S. W. Calgary, Alberta 2TP 2Y5	Ian R. Smyth Executive Director (403) 269-6721	Prediction and monitoring Mitigation EIA management and decision making	Acid deposition research program Land farming of oily sludges Incineration of industrial wastes Good waste management practices in the petroleum industry Development of sulphur dust monitors No dispersion models
Domtar Inc. 395 Boul. de Maisonneuve O. Montreal, Quebec H3C 3M1	R. McLean Manager, Environmental Services (514) 457-6810	Mitigation	Testing of effluent treatment systems for the pulp and paper industry
Dow Chemical of Canada Ltd. Sarnia, Ontario N7T 7K7	M. Baldwin Head, Research and Development (519) 339-3603	Prediction and monitoring Mitigation	Treatment of leachate from waste sites (with Environment Canada)

Future areas of Interest	Type of Funding Support	Funding Constraints (and other notes)
Acid rain impacts Sport fisheries quotas	C,P,S	Application to recreation, fish and/or wildlife
Quotas for sportfishing Effects of liming Quebec lakes to reduce acid rain impacts	C,P,S	Application to Quebec environment; apply by May or June for next fiscal year (April 1)
None identified	C,P,S	Relevance to Saskatchewan
Technology transfer in EIA to provincial utilities	C	EIA research for hydro and thermal generation
Environmental information programs related to the petroleum industry	C	Application to petroleum exploration, production and pipelining
Bacteria control in effluent waters	C,P,S	Application to pulp and paper industry
Industrial waste management	C,P,S	Must be of environmental interest to Dow Chemical

TABLE 2 – Continued

Agency	Contact	Area of Research Interest	Recent Projects
Gulf Canada Resources Incorporated 401-9 Ave. S.W. Calgary, Alberta T2P 2H7	Millard Wright Chairman Environmental Research Advisory Committee (403) 233-4000	Prediction and monitoring Mitigation	Sulphur removal and soil reclamation
Institute for Chemical Science and Technology P.O. Box 2717 Sarnia, Ontario N7T 7V9	Bill Stadelman Director (Toronto) (416) 425-4126	Prediction and monitoring Mitigation	Land farming of industrial waste sludges
Interprovincial Pipe Line Limited P.O. Box 48 1 First Canadian Place Toronto, Ontario M5X 1A9	A. Ramsey Right-Of-Way Manager (416) 365-5669	Prediction and monitoring Mitigation and compensation Post-project evaluation	Effects of pipeline construction on stream crossings.
Petroleum Association for Conservation of the Environment (PACE) 1202- 275 Slater St. Ottawa, Ontario K1P 5H9	W. J. Hogg General Manager (613) 236-9122	Prediction and monitoring Risk analysis	Trace organics in refinery effluents Persistence of PAHs in soil Clean-up methods for oil-contaminated stream banks
Union Gas Limited 50 Keil Drive North Chatham, Ontario N7M 5M1	Ian Moncrieff Environmental Planner (519) 352-3100	Mitigation	Agricultural rehabilitation of disturbed lands Cost/benefit study on EIAs for pipelines (with EPS)
Public interest Groups			
Canada West Foundation 1123-333-7 Avenue S.W. Calgary, Alberta T2P 2Z1	Dr. David Elton President or Nancy Sanford Administrative Officer (403) 264-9535	EIA management and decision making	Water resource management in Western Canada Environmental and socio-economic factors associated with coal industry in Western Canada
Donner Canadian Foundation Box 122 Toronto Dominion Centre Toronto, Ontario M5K 1H1	D. S. Rickerd President (416) 869-1091	Prediction and monitoring Risk analysis Mitigation and compensation	Minimata disease in Quebec (mercury effects) Environmental mediation Acid rain studies Great Lakes pollution
Ducks Unlimited Canada 1190 Waverley Street Winnipeg, Manitoba R3T 2E2	D. S. Morrison Executive Vice-President (204) 477-1760	Mitigation	
Laidlaw Foundation 203-60 St. Clair Ave E. Toronto, Ontario M4T 1N5	Nathan Gilbert Executive Administrator (416) 964-3614	Mitigation	Coalition on acid rain Funding of Great Lakes Centre Great Lakes water issues

Future areas of Interest	Type of Funding Support	Funding Constraints (and other notes)
Waste management and disposal	C	Application to Gulf resource projects; non project-specific studies geared more toward Canadian Petroleum Association
Industrial waste disposal in the chemical and petroleum processing industry Environmental impact and control of industrial air and water plumes	C	Application to chemical and/or petroleum processing industry
Impacts of linear development on agricultural lands	C	Application to Canadian pipeline industry.
Obtain direction from association members (no priority areas stated)	C	Restricted to research involving environment and occupational health in petroleum industry
Environmental policy and practices handbook for pipelines Waste management for synthetic lubricants, PCBs,etc.	C	Relevance to Union Gas; apply by December 1 for next fiscal year
Water resource management Use of marginal lands for agricultural production Socio-economic impacts of development in Western Canada	G	Application to Western Canada
None specified	G	None specified
Marsh management, development and restoration	G,C,P	Marsh management; work primarily with prairie habitat in Manitoba, Saskatchewan and Alberta
Conservation	G	Would like to discuss prior to any commitment

TABLE 2 – Continued

Agency	Contact	Area of Research Interest	Recent Projects
Richard Ivey Foundation 618 Richmond Street London, Ontario N6A 5J9	S. McLean Research Officer (519) 673-1280	EIA management and decision making Mitigation	Wetland studies Purchase of natural areas for preservation Hazardous waste management for small industry (guide book)
Sir Joseph Flavelle Foundation c/o National Trust Co. Ltd. 21 King Street East Toronto, Ontario M5C 1B3	P. J. Sewell Secretary (416) 361-4095	Mitigation	Conservation authority studies
World Wildlife Fund Canada 201-60 St. Clair Ave. East Toronto, Ontario M4T 1N5	Stephen Price VP Conservation (416) 923-8173	Prediction and monitoring Risk analysis Mitigation	Wildlife toxicology studies
Academic Institutions			
McGill University 845 Sherbrooke St. W. Montreal, Quebec H3A 2T5	Dr. Gordon McLauglin Dean of Research (514) 392-8245	Prediction and monitoring	Microclimate effects on permafrost and distribution Environmental effects of snow cover

[1] C = contract; G = grant; NA = not available; P = personnel; S = space.

Future areas of Interest	Type of Funding Support	Funding Constraints (and other notes)
Wetlands Wildlife management Protection of endangered species	G	Must have application to S.W. Ontario and be steered by a registered charitable organization
Conservation studies	G	Project must take place in Ontario; cofunding only with Ontario-based agencies (e.g., regional office of federal agency)
Conservation of wildlife Reintroduction of endangered wildlife species	C	Must be wildlife oriented applied research (no funds available for conferences or seminars)
Snow, permafrost, and biological studies at Schefferville	Personnel and lab facilities at Schefferville	Must be related to programs of interest to Centre for Northern Studies

3. CONCLUSIONS AND RECOMMENDATIONS

Conclusions

A number of conclusions can be drawn as a result of this survey.

- Federal agencies, provincial agencies and industry associations are the most promising potential funding sources for EIA/SIA research of a non project-specific nature.
- Interest by private companies in EIA/SIA research is primarily of a project-specific nature, although some companies have expressed a willingness to participate in cofunding of non project-specific studies. The latter interest is usually by companies that are not represented by an industry association having an environmental research component.
- Private foundations and national wildlife organizations are the most promising sources of funding in the public interest group sector.
- Universities generally have no funds for co-operative EIA/SIA research efforts. However, they can provide a significant role by offering staff and laboratories where available.
- Significant additional potential funding sources were identified during this survey (Appendix A-3) and it is believed that this list can be expanded even further.
- Survey results indicate that waste management is currently a high priority area in the industrial sector as noted in Table 2.
- A telephone survey tends to restrict the extent of details readily available, particularly with regard to amounts available for funding and identification of future priority areas for research. However, the general topic of "funding" is a sensitive and sometimes confidential issue and, in many cases, it may not be possible (or cost-effective) to glean further information, even if given the time for a written response.

Recommendations

As a result of the survey, we recommend that the following steps be taken:

- In view of the recent research funding survey initiated by the Canadian Council of Resource and Environment Ministers, it would be advisable to communicate with this Council prior to any further studies.
- A number of new potential funding sources for EIA/SIA research were identified during this survey (Appendix A-3) and consideration should be given to expanding the survey to include these and other known potential funding sources.
- Since waste management has become an important issue in recent years, it would be beneficial to add industries such as Tricil to any future contact list.
- Computerization of the results in this report would provide flexibility in accessing and updating the data by agency type, area of research interest, project type, and so forth.

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APPENDIX A-1

PRELIMINARY CONTACT LIST

Federal Government (21 agencies)	Provincial Government (20 agencies)	Industry (11 agencies)	Public Interest Groups (12 agencies)	Academic Institutions (8 universities)
Land Resource Research Institute, Agriculture Canada	Alberta Environmental Research Trust	Canadian Electrical Association	Alberta Wildlife Foundation	Kananaskis Centre for Environmental Research, University of Calgary
Canadian Forestry Service Agriculture Canada	Alberta Environment	Canadian Forestry Association	Canada West Foundation	Concordia University, Montreal
Environmental Protection Branch, Energy, Mines & Resources	Alberta Research Council	Canadian Gas Association	Canadian Environmental Law Research Foundation	Institute for Resources & Environmental Studies, Dalhousie University
Natural Resources Division Environment Canada (Parks)	B.C. Ministry of Environment	Canadian Petroleum Association	Conservation Council of Ontario	Centre de recherches en aménagement et en développment, Université Laval
Environmental Impact Systems Division, Environment Canada	B.C. Research	Petroleum Association for Conservation of the Environment (PACE)	Ducks Unlimited Canada	Centre for Northern Studies and Research, McGill University
Atmospheric Environment Service, Environment Canada	Manitoba Research Council	Institute for Chemical Science & Technology	Federation of Associations on the Canadian Environment	Centre de recherche en sciences de l'environnement, (CERSE) Université du Québec à Montréal
Ecological Research & Int. Programs Division, Lands Directorate, Environment Canada	Manitoba Department of Environment	Gulf Canada	World Wildlife Fund	University of Waterloo
Canadian Environmental Advisory Council, Environment Canada	Manitoba Environment Council	Petro-Canada	Gladys and Merrill Muttart Foundation	University of Guelph
Fish Habitat Management Branch, Fisheries and Oceans Canada	New Brunswick Department of Environment	Dow Chemical	Donner Canadian Foundation	
Ocean Science Affairs Branch Fisheries and Oceans Canada	New Brunswick Research & Productivity Council	TransCanada Pipelines	Sir Joseph Flavelle Foundation	
Resource Development Impacts, Indian & Northern Affairs Canada	Newfoundland Department of Environment	Union Gas	Richard Ivey Foundation	
Social Research and University Affairs, Indian & Northern Affairs Canada	Nova Scotia Department of Environment		Laidlaw Foundation	
Northern Environmental Protection Directorate, Indian & Northern Affairs Canada	Nova Scotia Research Foundation			
Environmental Studies Revolving Fund, Indian & Northern Affairs Canada	Ontario Ministry of Environment			
Natural Sciences and Engineering, Research Council of Canada	Ontario Research Foundation			
National Research Council of Canada	Ontario Ministry of Natural Resources			

Federal Government (21 agencies)	Provincial Government (20 agencies)	Industry (11 agencies)	Public Interest Groups (12 agencies)	Academic Institutions (8 universities)
Social Sciences and Humanities Research Council of Canada	Environment Quebec			
Medical Research Council of Canada	Quebec Energy, Mines & Resources			
National Health Research & Development Program Health & Welfare Canada	Quebec Agriculture & Fisheries			
Canadian Council of Environment and Resource Ministers	Saskatchewan Department of Environment			
Federal Environment Assessment Review Office				

APPENDIX A-2

FINAL CONTACT LIST

Federal Government (19 agencies)	Provincial Government (26 agencies)	Industry (11 agencies)	Public Interest Groups (12 agencies)	Academic Institutions (4 universities)
* Land Resource Research Institute, Agriculture Canada	† Alberta Environmental Research Trust	† Canadian Electrical Association	* Alberta Wilderness Association	* Concordia University, Montreal
† Canadian Forestry Service, Agriculture Canada	† Alberta Energy and Natural Resources	* Canadian Forestry Association	† Canada West Foundation	† Centre for Northern Studies and Research, McGill University
† Environmental Protection Branch, Energy, Mines and Resources	† Alberta Environment	* Canadian Gas Association	*Canadian Environmental Law Research Foundation	* University of Waterloo
† Natural Resources Division Parks Canada	† Alberta Department of Forestry	† Canadian Petroleum Association	* Conservation Council of Ontario	* University of Guelph
† Environmental Impact Systems Div., Environment Canada	† Alberta Research Council	† Domtar (Quebec)	† Ducks Unlimited Canada	
† Atmospheric Environment Service, Environment Canada	† B.C. Ministry of Environment	† Petroleum Association for Conservation of the Environment (PACE)	* Federation of Associations on the Canadian Environment	
† Ecological Research & Int. Programs Division, Lands Directorate, Environment Canada	† B.C. Research	† Institute for Chemical Science & Technology	† World Wildlife Fund	
† Fish Habitat Management Branch, Fisheries and Oceans	† Manitoba Research Council	† Interprovincial PipeLine	* Gladys and Merrill Muttart Foundation	
† Fisheries Research Directorate, Fisheries and Oceans	† Manitoba Department of Environment	† Gulf Canada	† Donner Canadian Foundation	
† Resource Development Impacts, Indian and Northern Affairs Canada	† New Brunswick Department of Municipal Affairs and Environment	† Dow Chemical	† Sir Joseph Flavelle Foundation	
† Social Research and University Affairs, Indian and Northern Affairs Canada	† New Brunswick Research & Productivity Council	† Union Gas	† Richard Ivey Foundation	
† Northern Environmental Protection Directorate, Indian and Northern Affairs Canada	† Newfoundland Department of Environment		† Laidlaw Foundation	
† Environmental Studies Revolving Fund, Indian & Northern Affairs Canada	† Nova Scotia Department of Environment			
† Natural Sciences and Engineering Research Council of Canada	† Nova Scotia Research Foundation			

Federal Government (19 agencies)	Provincial Government (26 agencies)	Industry (11 agencies)	Public Interest Groups (12 agencies)	Academic Institutions (4 universities)
† National Research Council of Canada	† Ontario Ministry of Agriculture and Food			
† Social Sciences and Humanities Research Council of Canada	* EA Branch, Ontario Ministry of Environment			
† National Health Research & Development Program, Health and Welfare Canada	† Policy and Planning Branch, Ontario Ministry of Environment			
* Public Works Canada	† Ontario Research Foundation			
† Federal Environmental Assessment Review Office	† Fisheries Branch, Ontario Ministry of Natural Resources			
	† Wildlife Branch, Ontario Ministry of Natural Resources			
	† Environment Quebec			
	† Quebec Energy, Mines & Resources			
	† Quebec Agriculture & Fisheries			
	† Wildlife Branch, Quebec Recreation, Game and Fish			
	† Socio-economics & Research Service, Quebec Recreation, Game and Fish			
	† Saskatchewan Department of Environment			

* No resources for cofunding
† Interest in cofunding

APPENDIX A-3

ADDITIONAL POTENTIAL FUNDING SOURCES*

Federal Agencies	Contact	Phone
International Joint Commission	R.L. Thomas Director	(519) 256-7821
Canadian Wildlife Service	Dr. G.H. Finney Chief, Program Co-ordination and Research Division	(819) 997-1362
Pesticides Division, Agriculture Canada	Wayne Ormrod, Director or Jan Taylor, A/Director	(613) 992-2114
Environmental Studies Division, Indian and Northern Affairs Canada	Dr. David Stone	(819) 997-0045
Native Economy and Socio-economic Agreements, Indian and Northern Affairs Canada	Robert Sterling	(819) 994-6821
Public Review Division, Indian and Northern Affairs Canada	Don Bissett	(819) 997-9333
Natural History Research Program, Parks Canada	Dr. Bruce Leeson	(403) 292-4438
Ontario Soil and Water Program Regional Development Branch Agriculture Canada	Nelson Ball Director General	(416) 973-8172
Prairie Farm Rehabilitation Administration, Regina, Saskatchewan	H.M. Hill Director General	(306) 780-5081
Medical Research Council, Ottawa	Dr. Slotin, Director	(613) 990-7705
Provincial Agencies		
Forest Research Branch, Alberta Forest Service	J. Soos Director	(403) 962-8700
Office of Coal Research and Technology, Alberta Department of Energy		(403) 427-8042
Research Division, Alberta Agriculture	J.P. Mahone, Director	(403) 422-1382
Energy Conservation and Renewable Energy Research, Alberta Department of Energy	J. Kleta, Director	(403) 427-2983
Recreation, Parks and Wildlife Foundation, Edmonton	Executive Director	(403) 420-1345

* This list is not intended to be a comprehensive list of additional potential funding sources but could be used as a starting point for any additional funding surveys.

Provincial Agencies

Alberta Environmental Centre	Dr. R.S. Weaver Executive Director	(403) 632-6761
Alberta Oil Sands Technology and Research Authority	Registrar	(403) 427-7623
Coal Association of Canada	R.T. Marshall, President	(403) 262-1544
Energy Resources Conservation Board (Alberta)	V. Millard Chairman	(403) 297-8266
B.C. Energy, Mines and Resources	Dennis O'Gorman (Energy) Ray Crook (Mines) Bob Durie (Petroleum)	(604) 387-3392 (604) 387-3787 (604) 387-3485
Delta Waterfowl and Wetlands Research Station, Portage La Prairie, Manitoba	Bruce Batt Scientific Director	(204) 239-1900
Newfoundland Department of Forest Resources and Lands	George Ross or Gerald Fleming	(709) 637-2284 (709) 637-2349
Nova Scotia Department of Mines and Energy		(902) 424-4161
Forest Resources Group Ontario Ministry of Natural Resources	Ken Armson Executive Co-ordinator	(416) 965-4319

Industry

Canadian Pulp and Paper Research Institute	Dr. Berman Toxicologist	(514) 630-4100
Canadian Chemical Producers Association	J.M. Belanger President	(613) 237-6215
TransCanada Pipelines	R. Milne, Vice-President Environment	(416) 869-2825
Consumer's Gas	G. Bolubash	(416) 495-5738
TransNorthern Pipelines	G. Robinson	(416) 924-3353

Public Interest Groups

Canadian National Sportsman Fund	Dr. Wm. J. Walsh	(416) 593-7333
Federation of Ontario Naturalists	M. Singleton General Manager	(416) 444-8419
Canadian Wildlife Federation	K.A. Brynaert Executive Vice President	(613) 725-2191
Nature Conservancy of Canada	L. Mayeda Executive Director	(416) 486-1011
Pollution Probe	C.F.W. Isaacs Executive Director	(416) 926-1907
MacLean Foundation	Secretary	(416) 964-6802
Ontario Association of Landscape Architects	Glen Harrington	(416) 294-8282

APPENDIX B

EIA/SIA RESEARCH FUNDING TELEPHONE QUESTIONNAIRE

1. AGENCY NAME: _____

   ADDRESS: _____

   _____

2. CONTACT: _____

   POSITION: _____ PHONE: (_____) _____

3. GENERAL POLICY OF AGENCY RE FUNDING OF EIA/SIA RESEARCH:

   _____

   _____

   _____

   _____

4. TYPES OF NON PROJECT-SPECIFIC ENVIRONMENTAL/SOCIAL IMPACT ASSESSMENT STUDIES FUNDED BY AGENCY IN LAST THREE YEARS:

Type	**Approximate Level of Funding**		
	1984	**1985**	**1986**
a) Prediction and Monitoring	_____	_____	_____
b) Risk Analysis	_____	_____	_____
c) EIA Management and Decision Making	_____	_____	_____
d) Improvements in Administrative Procedures	_____	_____	_____
e) Mitigation and Compensation	_____	_____	_____
f) Post-Project Evaluation	_____	_____	_____

Others: _____

5. FUTURE AREAS OF EMPHASIS IN EIA/SIA RESEARCH

   _____

   _____

   _____

6. INTEREST IN PARTICIPATING IN:

   a) Cofunding of Projects Yes _____ No _____

   b) Parallel funding of Projects Yes _____ No _____

7. FUNDING SUPPORT AVAILABLE:

   Grants ——— Personnel ——— Contracts ——— Space———

   Other: ———————————————————————

8. FUNDING CONSTRAINTS (e.g., restriction to certain groups [graduate students] or provinces, type of research, etc.)

   ———————————————————————

   ———————————————————————

   ———————————————————————

9. EXTENT OF POTENTIAL FUNDING:

   <10,000 ——— 10,000–25,000 ——— >25,000–50,000 —

   >50,000–100,000 —— >100,000–500,000 —— >500,000–1,000,000 —

10. WHAT IS YOUR POLICY ON APPLICATION DEADLINES FOR COFUNDING?

    ———————————————————————

    ———————————————————————

    ———————————————————————

11. CONTACT PERSON TO SECURE FUNDING:

    ———————————————————————

    PHONE: (———) ———————————

12. DO YOU KNOW IF ANY OF YOUR CLIENTS BENEFITING FROM EIA/SIA RESEARCH WOULD BE WILLING TO PROVIDE FUNDING?

    YES ——————— NO ———————

    If yes, identify:

Agency Name	Contact	Phone
———————	———————	———————
———————	———————	———————
———————	———————	———————

13. NAMES OF OTHER AGENCIES POSSIBLY INTERESTED IN SUPPORTING EIA/SIA RESEARCH

Agency Name	Contact	Phone
———————	———————	———————
———————	———————	———————
———————	———————	———————

14. DO YOU KNOW OF ANY ORGANIZATIONS WHO HAVE PERFORMED A SIMILAR RESEARCH FUNDING SURVEY TO THIS ONE:

YES _____ NO _____

If yes, identify:

Agency Name	Contact	Phone
_____	_____	_____
_____	_____	_____
_____	_____	_____

APPENDIX C
PRELIMINARY SURVEY RESULTS

Type of Agency	Interest in Cofunding	No Funding Available	Total
Federal Agencies	3	2	5
Provincial Agencies	3	1	4
Industry Associations	3	2	5
Public Interest Groups	1	3	4
Academic Institutions	1	3	4
Total	11	11	22

Federal Agencies

Land Resource Research Institute, Agriculture Canada

Environmental Protection Branch, Energy, Mines and Resources*

Northern Environmental Protection Directorate, Indian Affairs and Northern Development*

Environmental Studies Revolving Fund, Indian Affairs and Northern Development*

National Research Council of Canada

Provincial Agencies

New Brunswick Department of Environment

Policy and Planning Branch, Ontario Ministry of Environment*

Ontario Research Foundation*

Nova Scotia Research Foundation Corporation*

Industry Associations

Canadian Electrical Association*

Canadian Forestry Association

Canadian Gas Association

Canadian Petroleum Association*

Petroleum Association for Conservation of the Environment (PACE)*

Public Interest Groups

Conservation Council of Ontario

Ducks Unlimited Canada*

Federation of Associations on the Canadian Environment

Canadian Environmental Law Research Foundation

Academic Institutions

Concordia University, Montreal

McGill University (Centre for Northern Studies and Research)*

University of Waterloo

University of Guelph

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* Interest in Cofunding

APPENDIX D

DRAFT TERMS OF REFERENCE FOR CCREM COMMITTEE ON RESEARCH CO-ORDINATION

Foreword

The Canadian Council of Resources and Environment Ministers (CCREM) established the Committee on Research Co-ordination at its annual meeting in Toronto in 1985. This Committee was established in recognition of the need for better co-ordination of federal and provincial environmental research and development programs. The Committee will initially focus on environmental protection research and development. In the longer term, the Committee will promote greater non-governmental involvement in environmental protection research and development and improved co-ordination and management of environmental research and development in Canada. The terms of reference for the Committee are listed below.

Terms of Reference

- Co-ordinate federal and provincial environmental protection research and development programs through identification of opportunities for joint planning of programs and co-operation in research.
- Promote environmental protection research and development in non-governmental sector through co-ordination/co-operation with government programs.
- Identify research and development needs through appropriate consultation in the environmental protection field.
- Recommend priorities for joint federal and provincial environmental protection research and development initiatives.
- Identify national and international sources of technical and scientific information and promote methods for information and technology transfer.
- Prepare workplans and special reports, and provide advice to CCREM on an annual basis as requested.

Reporting Relationships

The Research Co-ordination Committee reports to the Executive Committee of Co-ordinators.

Membership

Each member government decides how it can best be represented on the Committee. The Committee is comprised of participating and corresponding members.

Chairperson

The Chairperson is selected from the participating members. In accordance with CCREM practices, the Chairperson normally serves on a rotational basis.

The Chairperson works in collaboration with the Executive Director of CCREM since both have obligations to the Council with regard to achieving objectives.

Role of CCREM Staff

The role of CCREM staff with regard to all Council committees and working groups is to foster all Council activities and the achievement of its objectives.

The Executive Director is an ex-officio member of CCREM committees and works closely with the Chairman to promote the success of the programs.

Meetings are organized by Secretariat staff in consultation with the Chairman and committee members. Several factors are considered in the organization of a meeting: the need to meet, the location, the physical arrangements, and the catering and accommodation requirements.

Agenda items are solicited from Committee members. Agendas are then prepared and circulated by Secretariat staff in concert with the Chairman.

Minutes are recorded by the Secretariat staff who help to promote the implementation of decisions.

CANADIAN ENVIRONMENTAL ASSESSMENT RESEARCH COUNCIL

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